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Los Alamos
National Laboratory

Risk Reduction and Environmental Stewardship Division

Meteorology and Air Quality Group
(RRES-MAQ)

Quality Assurance Project Plan

for the

Title V Operating Permit Compliance Project

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9/23/04

General Information

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History of revision

This table lists the revision history of this plan.

Revision	Date	Description of Changes
0	1/21/00	New document.
1	9/17/04	Extension revisions to reflect Operating Permit issued by State of NM to LANL on April 30, 2004.

Section 1

Quality Program

Organization

Purpose of quality plan

This Quality Assurance Project Plan (QAPP) gives requirements for management of the Title V Operating Permit compliance project (referred to as "Operating Permit" or "Title V" or "Title V Operating Permit") within the Meteorology and Air Quality (RRES-MAQ or MAQ) group. This document is tiered to the MAQ Quality Management Plan (MAQ-QMP), which, together with the implementing permits and procedures, provides requirements and processes to ensure the project effectively maintains Los Alamos National Laboratory (LANL) compliance with the project's areas of responsibility within all state and federal air quality regulations.

This document also describes the roles and responsibilities of other LANL organizations for Title V Operating Permit compliance. This plan contains the requirements as established in their individual permits, or as specified in LANL's Operating Permit.

Scope of this plan

This plan applies to MAQ and LANL operations listed in the Title V Operating Permit. Operations listed in the Title V Operating Permit are identified in Section 5.0.

Applicable regulations

The drivers for the development and implementation of the Title V Operating Permit compliance project are:

- DOE Order 414.1A, Quality Assurance
- Title 20 Environmental Protection, Chapter 2.70 Air Quality, of the New Mexico Administrative Code (20.2.70 NMAC)
- 40 CFR 50 – 93 (Air Quality Programs)
- Title V – Permits of the Clean Air Act (CAA)

Organization, continued

DOE Order 414.1A

The structure of this plan is based on and addresses the ten criteria in the DOE order. Compliance with DOE Order 414.1A is a Department of Energy (DOE) requirement, rather than an environmental regulatory requirement.

Project organization

MAQ is organized by project teams under the line-management direction and responsibility of the group leader. See the MAQ-QMP for the group organizational structure. The Operating Permit Team Leader is responsible for this project. The organizational structure of the project is provided in Appendix A.

Other Laboratory organizations and sub-contractors will be utilized, as necessary, to facilitate performance of activities in accordance with this plan.

Project deliverables

The purpose of the Title V Operating Permit project is demonstration of compliance with the terms and conditions of LANL's Title V Operating Permit P100 issued April 30, 2004. Project deliverables to the New Mexico Environment Department (NMED) include semi-annual emission reports, semi-annual monitoring reports, annual compliance certification and, when required, deviation reports. Project deliverables are listed in Appendix H.

Structure of the quality program

This Quality Assurance Project Plan, including implementing procedures, is a second-tier document to the MAQ Quality Management Plan (QMP). The following documents provide requirements to ensure the project is operated in accordance with the above regulatory drivers:

- MAQ Quality Management Plan
- MAQ Operating Permit Quality Assurance Project Plan (this document)
- Implementing procedures

Revising this plan

The Operating Permit Team Leader, the MAQ Quality Assurance Officer, and the MAQ Group Leader will approve all revisions to this plan.

Distributing this plan

Controlled copies of this plan will be made available to all affected organizations and individuals in accordance with MAQ-030, "Document Distribution."

Section 2

Personnel Development

Personnel Training and Qualification

Personnel requirements

Qualified team members will be hired and trained as prescribed in the MAQ QMP. Personnel are required to have knowledge of the following:

- Federal and State air quality regulations
- Engineering, such as Mechanical, Environmental or Chemical
- Chemical management
- Database management, computer science and web design
- Record Keeping
- Compliance assurance
- Laboratory operations

Training

All personnel performing project-related work are required to obtain appropriate training prior to performing work governed by a procedure. Training for MAQ personnel, and for persons performing MAQ procedures, will be performed and documented according to MAQ-024, "Personnel Training." Training of personnel in other groups will be performed and documented according to each group's training procedure.

Section 3

Quality Improvement

Improving Quality

Performance reports

Personnel assigned to perform project activities will provide periodic verbal or written updates to the Title V Operating Permit Team Leader. These updates will be used to keep group management apprised of the focus of Title V Operating Permit activities and any task shortcomings. These updates will address items such as:

- Audit/assessment activities relating to quality assurance of Title V Operating Permit activities
- Problems or deficiencies identified during assessment activities or during routine performance of work
- Task accomplishments made toward Title V Operating Permit goals and deliverables

Corrective actions within MAQ

Corrective actions for all MAQ projects are initiated, tracked, corrected, and documented according to the MAQ Quality Management Plan and group procedure MAQ-026, "Deficiency Tracking and Reporting."

Corrective actions within other organizations

Corrective action within other organizations will be documented and corrected.
I-Track is an issues tracking system for LANL. I-Track includes not only institutional issues but also organizational issues.

Quality improvement

Project activities will adhere to the policy for continuous improvement as given in the MAQ QMP.

Section 4

Documents and Records

Documents and Records

Policy

The Operating Permit Team will generate and retain sufficient records to ensure compliance with monitoring and recordkeeping requirements specified in the permit. The type and extent of records to be maintained are determined through this plan and it's implementing procedures, and are summarized in Appendixes C, D and E.

Additionally, electronic data will be maintained in a manner that ensures defensibility and accuracy.

Document control

This plan is controlled through the MAQ document control procedure (MAQ-030). The following personnel will be notified about revisions to this plan:

- MAQ Group Leader / Deputy Group Leader
- Operating Permit Team Leader
- LANL personnel assigned to the Operating Permit project
- MAQ Quality Assurance Officer
- Source Operators
- Assistant Area Manager, Office of Environment and Projects, DOE Los Alamos Area Office

Procedures

Procedures will be developed as necessary and in accordance with the policy in the group QMP and in accordance with MAQ-022, "Preparation, Review and Approval of Procedures."

MAQ records series

Documentation of the Title V Operating Permit activities is maintained as records by Title V Operating Permit personnel, under the direction of the MAQ Records Coordinator and in accordance with MAQ-025, "Records Management". These records are maintained in several series according to type of record and are usually arranged by source and year. Records are required to be maintained for at least five years in accordance with permit condition 3.2 of the Title V Operating Permit. An index of current record storage will be maintained in the records room.

Documents and Records, continued

Source operators records

Source operators will maintain records required by their individual permits and the LANL Title V Operating Permit. These records will be maintained at the site for at least five years and made available to RRES-MAQ and NMED personnel for inspection.

Permit

A copy of the Title V Operating Permit shall be kept at the permitted facility and shall be made available to NMED personnel for inspection upon request. MAQ will meet this requirement by maintaining a copy of the permit in the Title V record series and posting the permit on the group web site.

Disposition and retention

Active files are maintained and kept by assigned project personnel. After files have been finalized and all documentation is complete, files are submitted as records to the records coordinator. Records are archived in compliance with Laboratory and DOE requirements for records retention, storage, and management.

Implementation

The following table lists specific responsibilities.

Who	What
Operating Permit Team Leader	Ensure all personnel in the project are aware of records disposition and retention requirements. Ensure the permit is maintained in the records room and is posted on the group web page.
Operating Permit team members	Ensure all records are properly collected, filed, and preserved. Refer to Appendix C to determine which records are submitted to MAQ.
Source operators	Ensure all records are generated and maintained as required by permit terms. Maintain records at your site for at least five years.

Electronic media

Policy

The project will utilize electronic means as necessary to maintain data and to perform calculations on these data. Electronic means will not replace paper copy. All records that must be maintained to meet requirements of the Permit will be kept in hard copy as the official record.

The preferred electronic means for data storage is a Microsoft Access database. However, until database implementation is complete, use of spreadsheets will be acceptable if the function of such spreadsheets can be demonstrated through appropriate validation and verification methods.

Databases

Electronic data for this project will be managed in accordance with group policy and procedures for electronic data and back up of those data.

Databases

Backups -- All databases used to hold data and generate reports to be used to demonstrate compliance will be maintained on the "Databases" drive of the MAQ file server. These databases are backed up daily to minimize potential loss of data in accordance with EHS-17-034, Network Server Backup, Tape Rotation, Storage, and Archiving.

Verification of data -- All compliance-related data uploaded into a database will be verified to be accurate against the original paper copy. Data uploaded through electronic means will undergo 10% verification. Data uploaded through manual means will undergo 100% verification. The 100% review must be performed by someone other than the data entry person. This review will be documented and forwarded to the appropriate record series.

Verification of calculations -- All compliance-related calculations performed in a database through queries will be reviewed for accuracy by a person other than the person who generated the query. This review will be documented and forwarded to the appropriate record series.

Software control -- The integrity of all databases will be ensured by maintaining them on the MAQ file server. This will enable the Operating Permit Team Leader, through the MAQ database administrator, to control access to these databases to only trained authorized persons. See the MAQ QMP for additional information on software quality assurance.

Electronic media, continued

Spreadsheets

Backups -- All spreadsheets used to hold data and generate reports to be used in demonstrating compliance will be maintained on the projects drive. Spreadsheets will be backed up at least weekly.

Verification of data – All compliance-related data uploaded into a spreadsheet will be verified to be accurate against the original paper copy. Data uploaded through electronic means will undergo 10% verification. Data uploaded through manual means will undergo 100% verification. The 100% review must be performed by someone other than the data entry person. This review will be documented and forwarded to the appropriate record series.

Verification of calculations -- All compliance-related calculations performed in a spreadsheet will be reviewed for accuracy by a person other than the person who generated the spreadsheet. This review will be documented and forwarded to the appropriate record series. Modifications to the function of these spreadsheets will also be verified in this manner.

Software control -- The integrity of spreadsheets will be ensured by limiting access to these spreadsheets to only trained, authorized personnel. Additionally, at least once per year, the function of the spreadsheets will be verified by hand calculations. Documentation of this review will be forwarded to the appropriate record series.

Section 5

Work Processes

Planning and Performing Work

Purpose of work processes

The Operating Permit Project performs work to demonstrate compliance with **Operating Permit P100 issued April 30, 2004**. The Air Quality Bureau of the New Mexico Environment Department issued the Operating Permit to LANL pursuant to the federal Clean Air Act, the New Mexico Air Quality Control Act and regulations adopted pursuant to the state and federal Acts, including Title 20, New Mexico Administrative Code, Chapter 2, Part 70 (20.2.70 NMAC) - Operating Permits. The permit specifies terms and conditions for the operation of regulated air emission sources at LANL to assure compliance with all applicable requirements, as defined in 20.2.70 NMAC, at the time the permit was issued.

Permit Shield

Pursuant to 20.2.70.302 J.NMAC, compliance with the conditions of the Operating Permit shall be deemed to be compliance with any applicable requirements existing as of the date the permit was issued. Applicable requirements are listed in Appendix I.

Payment of fees

LANL shall pay fees to NMED consistent with the fee schedule in 20.2.71 NMAC - Operating Permit Emission Fees. Fees will be assessed and invoiced annually. The Support Services Subcontractor is budgeted to pay this fee, and submission to NMED is coordinated through Facility and Waste Operation Division's Utilities and Infrastructure Group (FWO-UI) and MAQ.

Information and requirements for emissions units

Information regarding applicable requirements, emission limits, operational requirements, monitoring requirements, recordkeeping requirements and roles and responsibilities are provided below for each emissions unit or set of similar units. More detailed information is located in LANL's Title V Application submitted November 27, 2002.

Planning and Performing work, continued

Work process description

Work processes included in this section are divided as follows:

- 5.1 Sources
- 5.2 Source Categories
- 5.3 Source Testing
- 5.4 Deviations & Emergencies
- 5.5 Facility Wide Emission Limits
- 5.6 Reporting
- 5.7 Risk Management 112(r) Applicability
- 5.8 Modifying the Permit Application

5.1.1 Source: Asphalt Production

General description of work

LANL is permitted to operate an asphalt plant, BDM Engineering, Model Number TM2000, to produce asphalt for minor road repair and paving. The plant uses a rotary dryer, a vibrating screen, and a weigh hopper to prepare an aggregate of rock and sand which is mixed with liquid asphalt in the mixer. Pollution control devices in use are a cyclone and a baghouse. Air emissions from the asphalt plant are based upon production rates. In order to control emissions of criteria pollutants at LANL, a production limit of 13,000 tons per year is in place for the plant. This source has not started.

Regulatory drivers

- NSR Permit Number GCP3-2195G.
- 20.2.11 NMAC, Asphalt Process Equipment
- 40 CFR Part 60, Subpart I – Standards of Performance for Hot Mix Asphalt Facilities

Operational requirements

- Total sulfur content shall be no more than 0.75 percent by volume for any natural gas used.
- Total sulfur content shall be no greater than 0.5 percent by weight for any propane used.
- All unpaved haul roads shall be watered to prevent visible emissions.
- Plant operations shall be in accordance with NSR permit GCP3-2195G, section III, D, E, F, H, I, K.

Emission control requirements

- The asphalt process equipment shall not operate without a fugitive dust control system to limit particulate emissions to the stack outlet.
- The asphalt plant shall equip and operate all screens, conveyor belts, and transfer points with dust collection and control systems sufficient to prevent opacity from exceeding 20%.
- The baghouse shall be equipped with a device to continuously monitor differential pressure across the baghouse.

Operating schedule

- Hours of operation are limited to one-half hour following sunrise, one-half hour before sunset, and those daylight hours in between.
- Hours of operation are limited to 4,380 hours per year.

Process limits

Production shall not exceed 13,000 tons per year, 12-month rolling total.

5.1.1 Source: Asphalt Production, continued

Allowable emission limits

Technical Area (TA)-60-BDM Allowable Emission Limits				
NO_x	SO_2	PM	CO	VOC
1.0 tpy	1.0 tpy	0.04 gr/dscf 35.4 lbs/hr	2.6 tpy	1.0 tpy

tpy – tons per year
gr/dscf – grains per dry standard cubic foot
lbs/hr – pounds per hour
NO_x – nitrogen oxides
SO_2 – sulfur dioxide
PM – particulate matter
CO – carbon monoxide
VOC – volatile organic compounds

Opacity standard

Visible emissions shall not exhibit an opacity of 20 % or greater.

Emissions monitoring requirements

- Perform monthly six (6) minute opacity readings for each emission point having opacity greater than zero as determined by Environmental Protection Agency (EPA) Method 22. Use 40 CFR Part 60, Appendix A, Method 9 to determine compliance with the opacity limitation.
- Monitor the differential pressure (inches of water) across the baghouse by the use of a differential pressure gauge, in accordance with condition IV.C.2 of NSR permit number GCP-3-2195G.

Emission testing

A particulate matter and opacity test are required after start-up.

5.1.1 Source: **Asphalt Production**, continued

Record keeping requirements

Keep records of applicable requirements in NSR permit number GCP-3-2195G, section IV.D, consisting of:

- actual hours of operation
- production rates
- number of haul truck trips daily
- fuel sulfur content
- tickets of fuel purchased
- quantity and frequency of water applied to haul roads
- frequency of haul road sweeping
- copies of proposed and performed maintenance

Keep compliance test results for particulate matter and opacity performed within 60 days of initial startup.
Maintain results of monthly six (6) minute opacity readings.
Maintain records of monitoring of the differential pressure across the baghouse.

Reporting requirements – emissions

Calculate emissions from facility production rates using asphalt plant emission factors. Include emissions in Title V semi-annual emission reports and the annual emission inventory report.

Reporting requirements – monitoring

Include monthly opacity reports in semi-annual monitoring report to NMED.

Compliance certification

Complete semi-annual self-inspection checklist to document annual compliance certification.

5.1.1 Source: Asphalt Production, continued

Implementation The following table lists specific responsibilities.

Who	What
Operating Permit Team	Provide start-up notifications to NMED and assist with initial compliance source testing. Maintain compliance test results for particulate matter and opacity performed within 60 days of initial startup. Track asphalt production rates monthly and compare 12 month rolling totals to permit limit Include monthly opacity tests in the semi-annual monitoring report. Maintain and publish self-inspection checklist. Maintain RRES-MAQ compliance web site.
Reporting Team	Calculate asphalt plant emissions and include in semi-annual Title V emission report and annual emission inventory report.
SSS Source Operators	Maintain the following records on-site: • actual hours of operation • production rates • number of haul truck trips daily • fuel sulfur content • tickets of fuel purchased • quantity and frequency of water applied to haul roads • frequency of haul road sweeping • copies of proposed and performed maintenance Perform monthly six (6) minute opacity readings at all required locations. Maintain records of the monitoring of the differential pressure across the baghouse (monitoring required twice daily). Submit monthly Data Deliverable to MAQ with: Asphalt production rates Monthly six (6) minute opacity readings Provide semi-annual self-inspection certification to MAQ.

5.1.2 Source: Boilers & Heaters

General description of work

LANL maintains and operates many small natural gas-fired boilers, personal comfort heaters and furnaces, personal use water heaters, and combined comfort heating, ventilation, and air conditioning (HVAC) units with small gas heaters.

- There are approximately 200 small boilers that range in size from 0.075 MMBtu/hr to 14.6 MMBtu/hr for the maximum nameplate heat input capacity. (meets NMED's criteria as insignificant)
- There are approximately 1100 small furnaces, heaters, and HVAC units in addition to the boilers with an average size range of 0.05 MMBtu/hr to 0.2 MMBtu/hr. (meets NMED's criteria as insignificant)
- LANL operates seventeen larger boilers (excluding the Power Plant, but including the Steam Plant) that do not meet the insignificant emission unit criteria established by NMED.

Regulatory driver

40 CFR Part 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (Units TA-55-6-BHW-1and TA-55-6-BHW-2 only)
20.2.61 NMAC, Smoke and Visible Emissions

Units

Emission Unit No.	Location/ Building	Manufacturer/ Model	Maximum Heat Input (nameplate)[1] MMBtu/hr	Type of Control
TA-16-1484-BS-1	TA-16-1484	Sellers 183H.P.-SH-LN390	7.47	Low-NO_x
TA-16-1484-BS-2	TA-16-1484	Sellers 183H.P.-SH-LN390	7.47	Low-NO_x
TA-16-1485-BS-1	TA-16-1485	Sellers 227H.P.-SH-LN390	9.23	Low-NO_x
TA-16-1485-BS-2	TA-16-1485	Sellers 227H.P.-SH-LN390	9.23	Low-NO_x
TA-21-357-1	TA-21-357	Industrial Boiler 3WB350HCG0	12.1	None
TA-21-357-2	TA-21-357	Industrial Boiler 3WB350HCG0	12.1	None
TA-21-357-3	TA-21-357	Industrial Boiler 3WB350HCG0	12.1	None
TA-48-1-BS-1	TA-48-1	Sellers 15 Seniors-150	6.28	None

5.1.2 Source: Boilers & Heaters, continued

Emission Unit No.	Location/ Building	Manufacturer/ Model	Maximum Heat Input (nameplate)[1] MMBtu/hr	Type of Control
TA-48-1-BS-2	TA-48-1	Cleaver Brooks CB-700-150	6.28	None
TA-48-1-BS-6	TA-48-1	Cleaver Brooks CB-700-200 1558	8.40	None
TA-50-2	TA-50-2	Superior MS6-5-1500-S260-M	12.6	None
TA-53-365-BHW-1	TA-53-365	Sellers 15 Seniors-2-200-w	8.37	None
TA-53-365-BHW-2	TA-53-365	Sellers 15 Seniors-2-200-w	8.37	None
TA-55-6-BHW-1	TA-55-6	Sellers 350 H.P. W-LN490	14.6	None
TA-55-6-BHW-2	TA-55-6	Sellers 350 H.P. W-LN490	14.6	None
TA-59-1-BHW-1	TA-59-1	Cleaver Brooks CB-700-150	6.28	None
TA-59-1-BHW-2	TA-59-1	Cleaver Brooks CB-700-150	6.28	None

MMBtu/hr – million BTU per hour

Emission control requirements

N/A

Operating schedule

24 hours per day, 7 days per week.

Process limits

Natural gas usage is limited to 870 MMscf/yr (million standard cubic feet per year), 12-month rolling total, for all boilers listed above and all other boilers and heaters at LANL that qualify as insignificant activities, except emission units TA-21-357-1, TA-21-357-2, and TA-21-357-3 (section 5.1.3).

5.1.2 Source: Boilers & Heaters, continued

Emission limits

Source	Allowable Emission Limits				
All boilers and Heaters[1]	NO_x (tpy)	CO (tpy)	PM or PM_{10} (tpy)	SO_2 (tpy)	VOC (tpy)
	80	80	50	50	50

[1] Excludes TA 3-22 Power Plant; includes TA-21 Steam Plant

Opacity standard

Visible emissions shall not equal or exceed 20% opacity.

Emissions monitoring requirements

Emission units TA-55-6-BHW-1 and TA-55-6-BHW-2: A volumetric flow meter shall be utilized to measure the total amount of natural gas being used on a monthly basis.

Emission testing

Not required.

Record keeping requirements

All boilers and heaters, including insignificant emission units: Records of total natural gas and fuel oil usage shall be kept on a monthly basis.

Reporting requirements – emissions

Calculate emissions for all boilers and heaters, including insignificant units, from LANL natural gas and fuel oil usage reports. Include emissions in Title V semi-annual emission reports and annual emission inventory report.

Reporting requirements – monitoring

Include any opacity reports in semi-annual monitoring report to NMED.

Compliance certification

Complete semi-annual self-inspection checklist to document annual compliance certification.

5.1.2 Source: Boilers & Heaters, continued

Implementation The following table lists specific responsibilities.

Who	What
Operating Permit Team	Track natural gas and fuel oil usage and compare to limits. Include opacity reports in semi-annual monitoring report. Maintain RRES-MAQ compliance web site.
Reporting Team	Calculate emissions and include in semi-annual Title V emission report and annual emission inventory report.
ESA / TA-16 FM	Submit monthly gas meter reading to FWO-UI for inclusion in the Facility Natural Gas Usage Report.
NMT / TA-55 FM	Submit monthly gas meter reading to FWO-UI for inclusion in the Facility Natural Gas Usage Report.
TA-50	Submit monthly gas meter reading to MAQ.
SSS	Prepare and submit monthly Facility Wide Natural Gas Usage and Plant Quantities reports.

5.1.3 Source: Boilers and Heaters (TA-21 Steam Plant)

General description of work	The TA-21-357 steam plant consists of three boilers installed in 1983 and manufactured by the Industrial Boiler Company. The boilers were designed to burn either natural gas or No. 2 fuel oil. Natural gas is the primary fuel. Fuel oil is available for use in emergencies, such as an interruption in the gas supply. Steam produced in the TA-21-357 steam plant is used to provide space heating for the buildings in TA-21.
Regulatory driver	20.2.61 NMAC, Smoke and Visible Emissions
Emission control requirements	N/A
Operating schedule	24 hours a day, 7 days a week.
Process limits	Natural gas usage is limited to 60 MMscf/yr and fuel oil usage to 10,000 gallons per year, 12-month rolling total.
Emission limits	Included in emissions numbers for all Boilers in Heaters, Section 5.1.2.
Opacity standard	Visible emissions shall not equal or exceed 20% opacity.
Emissions monitoring requirements	A volumetric flow meter shall be utilized to measure the total amount of natural gas being used on a monthly basis.
Emission testing	Not required.

5.1.3 Source: Boilers and Heaters (TA-21 Steam Plant), continued

Record keeping requirements

Records of total natural gas and fuel oil usage shall be kept on a monthly basis.

Reporting requirements – emissions

Calculate emissions from LANL natural gas and fuel oil usage reports. Include emissions in Title V semi-annual emission reports and annual emission inventory report.

Reporting requirements – monitoring

Include any opacity reports in semi-annual monitoring report to NMED.

Compliance certification

Complete semi-annual self-inspection checklist to document annual compliance certification.

Implementation

The following table lists specific responsibilities.

Who	What
Operating Permit Team	Track natural gas and fuel oil usage and compare to limits. Maintain and publish self-inspection checklist. Include opacity reports in semi-annual monitoring report. Maintain RRES-MAQ compliance web site.
Reporting Team	Calculate emissions and include in semi-annual Title V emission report and annual emission inventory report.
SSS	Prepare and submit monthly Facility Wide Natural Gas Usage and Plant Quantities reports.

5.1.4 Source: Carpenter Shops

General description of work

LANL operates two carpenter shops which are included in the Title V Operating Permit. The TA-3 SM-38 carpenter shop, constructed prior to 1960, consists of various saws, drill presses, grinders, and sanders. The dust generated from this shop is vented through separate regional exhaust systems to one of three cyclones. The TA-15 Building 563 carpenter shop, constructed in 2002, consists of various saws, drills, sanding, and shaping equipment. The dust generated from this shop is exhausted to a single cyclone.

Regulatory driver

None

Operational requirements

TA-15 carpenter shop is limited to use of softwoods.

Emission control requirements

Process cyclones shall operate during shop operations that are vented to the cyclone.

Operating schedule

Saws, drills, shaping and sanding equipment shall operate at a maximum of 4368 hours per year, per shop.

Process limits

None.

Emission limits

Source	**Allowable Emission Limits** PM_{10} (tpy)
TA-15-563	2.81
TA-3-38	3.07

tpy = tons per year

Emissions monitoring

The operators shall maintain a log of the hours each carpenter shop is in operation. Hour meters on the pollution control device is sufficient to meet this requirement, provided the meters are read monthly and recorded.

5.1.4 Source: Carpenter Shops, continued

Emission testing

None required.

Record keeping requirements

Record the hours of operation for each shop monthly.

Reporting requirements – emissions

Calculate emissions using hours of operation and carpenter shop emission factors. Include emissions in Title V semi-annual emission reports and annual emission inventory report.

Reporting requirements – monitoring

None required.

Compliance certification

Complete semi-annual self-inspection checklist to document annual compliance certification.

Implementation

The following table lists specific responsibilities.

Who	What
Operating Permit Team	Maintain and publish self-inspection checklist.
Reporting Team	Calculate emissions and include in semi-annual Title V emission report and annual emission inventory report.
DX Operator	Maintain hours of operation records and submit to MAQ. Ensure management controls are in place to ensure the process cyclones are on when operating equipment. Complete and submit annual self-inspection checklist to MAQ.
SSS Operator	Maintain hours of operation records and submit to MAQ. Ensure management controls are in place to ensure the process cyclones are on when operating equipment. Complete and submit annual self-inspection checklist to MAQ.

5.1.5 Source: Chemical Usage

General description of work

LANL scientists conduct a wide variety of research and development (R&D) activities. R&D activities often involve the use of small quantities of various chemicals, many of which are CAA-regulated pollutants. Chemical use is tracked diligently through a chemical inventory tracking system. Purchases of regulated chemicals go through a central purchasing system before they are brought on-site. When chemicals are brought on-site, they are bar-coded and entered into a facility-wide chemical tracking database. Based on the past two year's analysis approximately 40,000 – 50,000 separate chemical purchase line-items are entered into the database each year.

LANL estimates emissions based on a very conservative assumption that the total amount of regulated chemicals purchased is equivalent to total emissions. This is a very conservative approach because it assumes all chemicals purchased are used and evaporate as air emissions. It does not take into account chemicals that are purchased and remain in a process, or the amount of chemicals that are disposed of as waste. Occasionally, process knowledge is used to refine emission estimates. Chemicals used for activities that qualify as trivial or exempt activities are deleted from analysis (e.g., grounds and building maintenance, calibration of laboratory equipment, etc.).

Emission limits

The contribution of VOC and/or hazardous air pollutants (HAPs) emissions from chemical usage shall not cause the corresponding facility-wide limits of 200 tons per year of facility-wide VOCs, 8 tons per year of individual facility-wide HAP, or 24 tons per year of total facility-wide HAPs to be exceeded.

Emissions monitoring requirements

Maintain records of chemical purchasing through facility-wide chemical tracking system.

Record keeping requirements

Maintain records of chemical purchasing through facility-wide chemical tracking system.

Reporting requirements – emissions

Calculate emissions using records from the facility-wide chemical tracking system. Include emissions in Title V semi-annual emission reports and annual emission inventory report.

5.1.5 Source: Chemical Usage, continued

Reporting requirements – monitoring

None required.

Compliance certification

Complete annual self-inspection checklist to document annual compliance certification.

Implementation

The following table lists specific responsibilities.

Who	What
Operating Permit Team	Develop and maintain tools to download and process ChemLog data. Maintain and publish self-inspection checklist. Maintain RRES-MAQ compliance web site.
Reporting Team	Calculate emissions and include in semi-annual Title V emission report and annual emission inventory report.
LANL Chemical Users	Maintain accurate inventory of chemicals in ChemLog as required by LIR 402-510-01, Chemical Management.

5.1.6 Source: Degreasers

General description of work

LANL operates three solvent cleaning machines, or degreasers, that use regulated halogenated solvents. Trichloroethylene is typically used as the solvents, but other solvents may be used in the future. Trichloroethylene is both a VOC and HAP. The solvents are not heated or boiled.

Applicable requirements

40 CFR Part 63, Subpart T, National Emission Standards for Halogenated Solvent Cleaning

Units

Emission Unit No.	Location/Building	Type of Degreaser
TA-55-DG-1	TA-55	Ultrasonic Cold Batch
TA-55-DG-2	TA-55	Ultrasonic Cold Batch
TA-55-DG-3	TA-55	Spray Cold Batch

Work practice standards

The facility shall comply with applicable requirements of 40 CFR Part 63, Subpart T including:

- Keep degreaser closed with tight fitting cover
- Maintain a freeboard ratio of 0.75 or greater
- Collect and store all waste solvent and wipe rags in closed containers
- Perform flushing within the freeboard area only
- Allow cleaned parts to drip for 15 seconds or until dripping stops
- Do not exceed the fill line on the solvent level
- Wipe up spills immediately
- Do not create observable splashing with agitation device
- Keep the degreaser from being exposed to drafts greater than 40 m/sec
- Do not clean sponges, fabric, wood, and paper

Emission limits

The contribution of VOC and/or HAPs emissions from chemical usage shall not cause the corresponding facility-wide limits of 200 tons per year of facility-wide VOCs, 8 tons per year of individual facility-wide HAP, or 24 tons per year of total facility-wide HAPs to be exceeded.

Emissions monitoring requirements

- Record amount of solvent added to degreaser and amount of solvent disposed.
- Complete checklist for work practice standards.

5.1.6 Source: **Degreasers**, continued

Emission testing

None required.

Record keeping requirements

Maintain records of solvent content and work practice checklists.

Reporting requirements – emissions

Calculate emissions from solvent usage records. Include emissions in Title V semi-annual emission reports and annual emission inventory report.

Reporting requirements – monitoring

- None required on semi-annual reports.
- On start-up of idle unit:
  - Submit notification of initial startup
  - Submit a compliance report 150 days after initial startup

Compliance certification

Complete annual self-inspection checklist to document annual compliance certification.

Implementation

The following table lists specific responsibilities.

Who	What
Operating Permit Team	Maintain and publish self-inspection checklist. Provide support and maintenance to MAQ's web reporting tool for degreaser solvent tracking. Maintain RRES-MAQ compliance web site.
Reporting Team	Calculate emissions and include in semi-annual Title V emission report and annual emission inventory report.
NMT Degreaser Operators	Record the amount of solvent added to the degreaser using MAQ's web reporting tool. Complete checklist for work practice standards. Complete annual self-inspection checklist to certify compliance and submit to RRES-MAQ.

5.1.7 Source: Internal Combustion Sources

General description of work

LANL is permitted to operate one stationary generator for process-related activities which is a 1500 kilowatt (kW) diesel fired unit located at TA-33. This unit has not been installed.

LANL maintains a pool of approximately 45 stationary standby generators at various locations throughout the laboratory. All of these generators meet the definition of standby equipment under 20.2.70 NMAC and are used solely to provide emergency backup power for less than 500 hours annually. LANL accepted limits on the operation of our stationary standby generators as part of our facility wide emission limits. The stationary standby generators are limited to an average of 168 hours per year each to assure facility wide emission limits are not exceeded.

Applicable requirements

The following requirements apply to emission unit TA-33-G-1:

- 20.2.61 NMAC
- NSR Permit Number 2195-F.

Units

Emission Unit No.	Location /Building	Equipment Type	Manufacturer /Model	Serial No.	Nameplate Capacity	Fuel Type
TA-33-G-1	TA-33	Diesel Fired Generator	Kohler/1600 ROZD	L862063	1600 kW	Diesel
Standby Generators (see Note 1)	Scattered	Natural Gas and Diesel Fired Generators	Various	Unknown	See Note 1	Natural Gas, Diesel, Propane and Gasoline

Note 1: See pages 3-54 through 3-56 of the application.

Operational requirements

TA-33-G-1 is limited to 12,000 kilowatt hours per day (kWh/day) and 1,350,000 kilowatt hours per year (kWh/year).

5.1.7 Source: Internal Combustion Sources, continued

Operating schedule

- TA-33-G-1 is limited at full capacity to eight hours a day between the hours of 7:00 am and 5:00 pm.
- Operation of the LANL stationary standby generator pool is limited to an average of 168 hr/year each to assure non-applicability of 20.2.74 NMAC, Prevention of Significant Deterioration (PSD).

Emission limits

The following table gives emission limits for internal combustion sources.

Source	Allowable Emission Limits											
	TSP		PM10		NO_x		CO		VOC		SO_x	
	pph	tpy	pph	tpy	pph	tpy	pph	tpy	pph	tpy	pph	tpy
TA-33-G-1	1.4	0.6	1.4	0.6	40.3	18.1	33.7	15.2	0.7	0.3	5.5	2.5

TSP = total suspended particulates
PM10 = particulate matter less than 10 microns in diameter
SO_x = sulfur oxides
Pph = pounds per hour
Tpy = tons per year

Opacity standard

Visible emissions shall not equal or exceed 20% opacity.

Emissions monitoring requirements

Stationary Standby Generators

- Track and record hours of operation for stationary standby generators on a semiannual basis.

TA-33-G-1

- Track hourly and 12-month rolling total kWh.
- Record hours of operation and the time operations begin and end each day.

Emission testing

Not required

5.1.7 Source: Internal Combustion Sources, continued

Record keeping requirements

Stationary Standby Generators

- Track and record hours of operation for stationary standby generators on a semiannual basis.

TA-33-G-1

- Track hourly and 12-month rolling total kWh.
- Record hours of operation and the time operations begin and end each day.

Reporting requirements – emissions

Calculate emissions based on usage records. Include emissions in Title V semi-annual emission reports and annual emission inventory report.

Reporting requirements – monitoring

None required.

Compliance certification

Complete annual self-inspection checklist to document annual compliance certification.

Implementation

The following table lists specific responsibilities.

Who	What
Operating Permit Team	Maintain and publish self-inspection checklist. Review generator usage to ensure LANL's average usage hours are not being exceeded. Periodically review LANL's generator policy to ensure LANL's average usage is sufficient for the number of generators on-site. Maintain RRES-MAQ compliance web site.
Reporting Team	Calculate emissions and include in semi-annual Title V emission report and annual emission inventory report.
FWO-MSE	Track and record hours of operation for stationary standby generators on a semiannual basis. Submit to RRES-MAQ. Ensure new generators are added to the MAQ inventory.
TA-33 Operators	Track hourly and 12-month rolling total kWh. Record hours of operation and the time operation begin and end each day.

5.1.8 Source: Data Disintegrator

General description of work	LANL is permitted to operate a data disintegrator capable of handling paper, microfiche, film, plastic magnetic tape and compact discs at TA-52-11. Air emissions from this unit are run through a cyclone separator and a baghouse.
Applicable requirements	None.
Operational requirements	Limited to 1200 pounds per hour throughput. We assume that each box weighs 45 pounds. Operators may count partial boxes (e.g., two half full boxes would be counted as one box).
Emission limits	TSP: 9.9 tons per year PM10: 9.9 tons per year
Emissions monitoring requirements	None.
Emission testing	Not required.
Record keeping requirements	Record the number of boxes shredded monthly. Include the date and the hours of operation in the log. Maintain adequate records to demonstrate compliance with manufacture's recommended repair and maintenance schedules for the cyclone and cloth tube filter(s).
Reporting requirements – emissions	Calculate emissions based on through put records. Include emissions in Title V semi-annual emission reports and annual emission inventory report.
Reporting requirements – monitoring	None required.

5.1.8 Source: Data Disintegrator, continued

Compliance certification

Complete semi-annual self-inspection checklist to document annual compliance certification.

Implementation

The following table lists specific responsibilities.

Who	What
Operating Permit Team	Maintain and publish self-inspection checklist. Maintain RRES-MAQ compliance web site.
Reporting Team	Calculate emissions and include in semi-annual Title V emission report and annual emission inventory report.
SSS	Maintain records of number of boxes shredded per month and submit to MAQ. Include date and start/stop times. Ensure allowable throughput limits are not exceeded. Maintain on-site maintenance records for the cyclone separator and the baghouse. Complete semi-annual self inspection checklist and submit to MAQ.

5.1.9 Source: Power Plant at Technical Area 3 (TA-3-22)

General description of work

The TA-03 Power Plant provides backup space heating to most buildings in TA-03. Steam produced is also used for process needs and to produce electricity in one 10-megawatt and two 5-megawatt steam turbine/generator sets. The plant consists of three dual fuel boilers with natural gas being the primary fuel and No. 2 fuel oil available as a standby. Each boiler has a nameplate maximum heat input capacity of 210 MMBtu/hr.

Applicable requirements

The following requirements apply to this facility:

- 20.2.33 NMAC, Gas Burning Equipment – Nitrogen Dioxide
- 20.2.34 NMAC, Oil Burning Equipment – Nitrogen Dioxide
- 20.2.61 NMAC, Smoke and Visible Emissions
- NSR Permit Number 2195-B

Regulated equipment

Emission Unit No.	Equipment Type	Manufacturer/ Model	Maximum Heat Input (nameplate)[1] MMBtu/hr	Fuel Type
TA-3-22-1	Boiler	Edgemoor/4008	210	Natural Gas/Fuel Oil
TA-3-22-2	Boiler	Edgemoor/4009	210	Natural Gas/Fuel Oil
TA-3-22-3	Boiler	Union/102824	210	Natural Gas/Fuel Oil

[1]Emission estimates from these units shall be based on the maximum heat input rating derated for altitude.

Operational requirements

- Natural gas used shall contain no more than 5 grains of total sulfur per 100 scf.
- No. 2 fuel oil used shall contain less than 0.34% sulfur by weight and is not a blend containing waste oils or solvents.
- The plant shall not use more than 4,000 MMscf of natural gas per 365 day rolling total or more than 500,000 gallons of No. 2 fuel oil per 12 month rolling total.

5.1.9 Source: Power Plant at Technical Area 3 (TA-3-22), continued

Emission limits

Nitrogen dioxide emissions shall not exceed 0.3 lb/MMBtu of heat input from any unit when burning natural gas or oil.

Source	Allowable Emission Limits											
	TSP (pph)		PM_{10} (pph)		NO_x (pph)		CO (pph)		VOC (pph)		SO_2 (pph)	
	Gas	Oil	Gas	Oil	Gas	Oil	Gas	Oil	Gas	Oil	Gas	Oil
TA-3-22-1	1.4	2.7	1.4	2.7	9.0	9.9	7.4	6.8	1.0	0.3	2.6	68.7
TA-3-22-2	1.4	2.7	1.4	2.7	9.0	9.9	7.4	6.8	1.0	0.3	2.6	68.7
TA-3-22-3	1.4	2.7	1.4	2.7	9.9	9.9	7.4	6.8	1.0	0.3	2.6	68.7
Total (tpy) 12-month rolling total	15.7		15.7		99.6		81.3		11.1		36.9	

Opacity standard

Visible emissions shall not equal or exceed 20% opacity.

Emissions monitoring requirements

- A volumetric flow meter shall be installed and utilized to measure the total amount of natural gas being used on a daily basis.
- Total fuel oil consumption shall be monitored on a monthly basis.
- If total natural gas used exceeds 3,400 MMscf per 365 day rolling total, semiannual compliance stack tests shall be conducted for NO_x and CO from each unit in accordance with NSR permit 2195B. This testing shall continue until natural gas usage is calculated to be less than 3,400 MMscf per 365 day rolling total for a total of 730 consecutive days.

Emission testing

An emission test was performed on the power plant for NOx and CO in September 2002.

5.1.9 Source: Power Plant at Technical Area 3 (TA-3-22), continued

Record keeping requirements

- Total fuel oil usage shall be recorded monthly and on a rolling twelve month total.
- A record of the total sulfur content of the No. 2 fuel oil used shall be obtained and kept from the supplier whenever oil is delivered to the facility.
- Records of total natural gas usage shall be kept daily and on a 365 day rolling total.
- A record shall be kept to verify natural gas consumed is pipeline quality natural gas (less than 5 grains of total sulfur per 100 standard cubic foot).

Reporting requirements – emissions

Calculate emissions based on natural gas and fuel oil records. Include emissions in Title V semi-annual emission reports and annual emission inventory report.

Reporting requirements – monitoring

Include opacity measurements when performed.

Compliance certification

Complete semi-annual self-inspection checklist to document annual compliance certification.

Implementation

The following table lists specific responsibilities.

Who	What
Operating Permit Team	Track natural gas and fuel oil usage and compare to limits. Maintain and publish self-inspection checklist. Maintain RRES-MAQ compliance web site.
Reporting Team	Calculate emissions and include in semi-annual Title V emission report and annual emission inventory report.

5.1.9 Source: Power Plant at Technical Area 3 (TA-3-22), continued

Who	What
Power Plant Operators	Monitor total fuel oil consumption on a monthly basis. If total natural gas used exceeds 3,400 MMscf per 365 day rolling total, notify MAQ so semiannual compliance stack tests can be conducted Record total fuel oil usages monthly and on a rolling twelve month total. Maintain a record of the total sulfur content of the No. 2 fuel oil used whenever oil is delivered to the facility. Maintain records of total natural gas usage daily and on a 365 day rolling total. Maintain a record to verify natural gas consumed is pipeline quality natural gas (less than 5 grains of total sulfur per 100 standard cubic foot).

5.1.10 Source: Rock Crusher

General description of work

The rock crusher was removed from the permit in June, 2004. NSR Permit 2195 will remain open to post exemption notices.

Applicable requirements

20.2.61 NMAC, Smoke and Visible Emissions
NSR Permit Number 2195, Rock Crusher

Reporting requirements – monitoring

This source has not started, and will not be used at LANL.

- Notify the Department within 15 days of equipment substitution or relocation of rock crusher outside the LANL boundary.

Implementation

The following table lists specific responsibilities.

Who	What
Operating Permit Team	Notify NMED when equipment leaves LANL. Maintain RRES-MAQ compliance web site.
Rock Crusher Operators	Notify MAQ when equipment leaves LANL.

5.2 Source Categories

Beryllium activities

Los Alamos National Laboratory (LANL) operates sources subject to 40 CFR 61, Subpart C, which have received 20.2.72 NMAC air construction permits from the New Mexico Environment Department (NMED). Currently, there are three active beryllium construction permits and four active registered beryllium sources at LANL. All regulated beryllium operations are included in the LANL Title V Air Operating Permit issued by NMED. Beryllium requirements, roles and responsibilities are contained the Quality Assurance Project Plan for the Beryllium National Emission Standards for Hazardous Air Pollutants (NESHAP) Compliance Project (RRES-MAQ-BeNESHAP).

Stratospheric ozone protection for ozone depleting substances (ODS)

LANL uses refrigerants regulated under Title VI of the Clean Air Act for Commercial and Comfort Cooling refrigeration systems. Requirements for Title VI are contained in Criterion 408 of LANL's Operations and Maintenance manual. The requirements, roles and responsibilities are contained in the Quality Assurance Project Plan for the Ozone Depleting Substances Compliance Project (RRES-MAQ-ODS).

Open burning

LANL shall obtain an open burn permit for activities for which a permit is required under 20.2.60 NMAC – Open Burning. LANL shall also comply with the terms and conditions of existing open burn permits issued pursuant to 20.2.60 NMAC – Open Burning, including Open Burn permits TA-11-OB-2003, TA-14-OB-2003, TA-16-OB-2003 and TA-36-OB-2003. A summary of the activities conducted under open burn permits is reported to NMED in our annual Fire Activity Report.

Note: Under new requirements issued December 31, 2003, construction permit applications were submitted to NMED in June 2004 to replace the above four permits.

Radionuclide NESHAPs

LANL shall comply with the requirements of 40 CFR Part 61, Subpart H – NESHAP for Radionuclides other than Radon from DOE Facilities and with the requirements of 40 CFR Part 61, Subpart Q – NESHAP for Radon Emissions from DOE Facilities. The requirements, roles and responsibilities for these programs are contained in Quality Assurance Project Plan for the Rad-NESHAP Compliance Project (RRES-MAQ-RN).

5.2 Source Categories, continued

Asbestos

LANL will comply with the requirements of 40 CFR Part 61, Subpart M – NESHAP for Asbestos. The requirements, roles and responsibilities for asbestos are contained in the Quality Assurance Project Plan for the Asbestos Report Task (RRES-MAQ-ASBESTOS).

5.3 Source Testing

Policy

NMED may require at any time source tests pursuant to EPA Reference Methods. When source testing is required, MAQ will work with the source operator to contract with a source testing company and prepare all test plans as required by NMED.

Records for source testing

All sampling and measured data shall be recorded. The minimum information to be included in these records is:

- equipment identification (include make, model and serial number for all tested equipment and equipment controls), date, and time of sampling or measurements
- date analyses were performed
- analytical or test methods used
- results of analyses or tests
- operating conditions existing at the time of sampling or measurement
- name and title of persons who performed the analyses

Retention

Keep copies of all monitoring and measurement data, equipment calibration and maintenance records, other supporting information, and reports for at least five (5) years from the time the data was gathered or the reports written. Each record shall show clearly to which emissions unit and/or piece of monitoring equipment to which it applies, and date the data was gathered.

Implementation

The following table lists specific responsibilities.

Who	What
Operating Permit Team	Contract with appropriate source testing organization. Provide required notifications to NMED. Work with source test organization to present test plans and results to NMED. Coordinate source testing organization access with the source operator. Coordinate development and approval of HCPs.
Source operators	Provide funding for source test. Provide access to the source test organization. Operate source in accordance with the permit requirements during the source test.

5.4 Emergencies

Emergencies

An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of LANL, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, or careless or improper operation.

Emergency

An emergency constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations contained in this permit if the LANL has demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- An emergency occurred and LANL can identify the cause(s) of the emergency
- The source was at the time being properly operated
- During the period of the emergency LANL took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit
- LANL fulfilled notification requirements under Condition 4.4 of the Operating Permit. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken

Implementation

The following table lists specific responsibilities.

Who	What
Operating Permit Team Leader	Verbally and via email notify LANL's chain-of-command. Verbally notify NMED Enforcement of any emergency or permit deviations. Prepare a written response to NMED within 10 days of the occurrence.

5.5 Facility Wide Emission Limits

General description of work

The total allowable emissions from this facility, excluding trivial activities, are shown in the following table. LANL has accepted facility-wide allowable emission limits for criteria pollutants and hazardous air pollutants (HAPs) as shown below. Emission limits for individual sources are listed in Appendix G.

Total allowable criteria pollutant and HAP emission limits

Pollutant	Emission Limit (tons per year)
NO_x	245
CO	225
VOC	200
SO_2	150
PM	120
HAPs	24 combined / 8 individual

Implementation

The following table lists specific responsibilities.

Who	What
Reporting Team	Compare actual emissions that occur during a reporting period with the facility wide allowable emission limits and include this comparison in the semi-annual emission reports to NMED.

5.6 Reporting

General description of work

The Title V Operating Permit requires LANL submit semi-annual emissions reports, the annual emissions inventory report, semi-annual monitoring reports, an annual compliance certification and reports of any deviations or emergencies. In addition, LANL will continue to submit reports required for asbestos, open burning, and beryllium.

Responsible official

A responsible official (as defined in 20.2.70 NMAC) shall certify the accuracy, truth and completeness of every report and compliance certification submitted to NMED as required by this permit. These certifications shall be part of each document. LANL's responsible official is the Associate Director for Operations (ADO).

Submittal of reports and certifications

Test protocols, excess emission forms, test reports, compliance notifications, monitoring results and reports, emissions sampling and measurement data, monitoring activity reports, compliance schedule progress reports, emissions reports, and any other compliance status information required by this permit shall be certified by the responsible official and submitted to:

Program Manager, Compliance & Enforcement Section
New Mexico Environment Department
Air Quality Bureau
2048 Galisteo Street
Santa Fe, New Mexico 87505

Questions about these reports should be directed to the Operating Permit Unit of the Air Quality Bureau in Santa Fe at (505) 955-8083.

5.6 Reporting, continued

Emissions report

In accordance with permit conditions 4.1 and 4.3 of LANL's Title V Operating Permit, LANL must submit semi-annual reports of actual emissions from permitted sources from Section 2.0 of the permit:

- Emission estimates of criteria pollutants NO_x, CO, SO_2, PM, and VOCs shall not include fugitive emissions
- Emission estimates of HAPs shall include fugitive emissions
- The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.11 of the permit
- Submit semi-annual emission reports within 90 days from the end of the reporting period [January 1st to June 30th, and July 1st to December 31st]

Emissions inventory report

LANL is required to submit an annual emissions inventory report to the NMED in accordance with 20.2.73 NMAC Notice of Intent and Emissions Inventory Requirements. NMED generally provides written instructions in mid-December on report contents. The report is due April 1st.

Note: There is considerable overlap between the annual emissions inventory report and the semi-annual Operating Permit reports. Because of format differences, both reports are still required to be submitted. Appendix F has a break-out of report requirements.

Monitoring report

In accordance with permit conditions 4.2 and 4.3 of LANL's Title V Operating Permit, LANL must submit semi-annual monitoring reports for permitted sources. The monitoring report content is detailed in Appendix D. In addition:

- Submit semi-annual monitoring reports within 45 days from the end of the reporting period [January 1st to June 30th, and July 1st to December 31st]
- All instances of deviations from permit requirements, including emergencies, shall be clearly identified in these reports

5.6 Reporting, continued

Deviation reports

LANL shall submit reports of all deviations (including emergencies) from permit requirements to the Department when they occur:

- LANL shall communicate initial notice of the deviation to NMED within twenty-four (24) hours of the start of the first business day following the start of the occurrence via telephone or facsimile. Notification should be made to NMED Enforcement/Compliance section.
- Within ten (10) calendar days of the start of the first business day following the start of the occurrence, written notice using the Excess Emissions Form (attached to this permit) shall be submitted to NMED

Compliance certification

In accordance with permit conditions 5.1 of LANL's Title V Operating Permit, LANL must submit an annual compliance certification report to NMED certifying the compliance status of LANL with respect to all permit terms and conditions:

- These reports shall be made on the Compliance Certification Report Form and submitted to NMED and to EPA at least every 12 months
- The reporting period is each calendar year; provided however, that the first report will only include those months within the year subsequent to permit issuance
- The report is due no later than January 30th following the reporting period

Fire activity report

LANL submits an annual Fire Activity Report to NMED to comply with the terms of LANL open burn permits. There is no required due date for this report, but LANL has set a date of March 1st to submit this report.

Asbestos reports

LANL submits quarterly asbestos waste disposal reports to NMED and provides annual estimates for asbestos removal work. Refer to the Quality Assurance Project Plan for the Asbestos Reporting Task (RRES-MAQ-ASBESTOS) for additional information.

Beryllium reports

LANL submits quarterly beryllium stack sample reports to NMED for the Beryllium Technology Facility. For additional information, refer to the Quality Assurance Project Plan for the Beryllium NESHAP Compliance Project (RRES-MAQ-BeNESHAP).

5.6 Reporting, continued

Implementation The following table lists specific responsibilities.

Who	What
Operating Permit Team	Prepare and submit to NMED semi-annual monitoring reports. Prepare and submit to NMED the annual compliance certification report. Prepare and submit to NMED any excess emission, deviation or emergency notification reports. Prepare and submit to NMED the annual Fire Activity Report.
Reporting Team	Prepare and submit to NMED semi-annual emission reports. Prepare and submit to NMED the annual emissions inventory report.
Asbestos SME	Prepare and submit to NMED reports as specified in the Asbestos NESHAP QAPP.
Beryllium SME	Prepare and submit to NMED quarterly beryllium sample reports as specified in the Beryllium NESHAP QAPP.

5.7 Risk Management (112(r)) Applicability Review

Regulatory driver

In 1990, Congress amended the CAA by adding Section 112(r), Prevention of Accidental Releases. Section 112(r) requires the EPA to establish a risk management program (RMP) to prevent accidental releases of flammable and toxic substances to the environment and to minimize the consequences in the event of a release. EPA established the requirements for the RMP in 40 CFR 68 that became effective on June 21, 1999. This program lists both toxic and flammable substances and their associated threshold quantities (TQs). Any process or storage facility that has any listed substance on-site in quantities exceeding the TQ is subject to EPA's RMP. Under the 112(r) program, the threshold determinations are based on the quantity of substance present at a particular location or in a particular process at any point in time (i.e., what is the potential for release during an accident) and not on the cumulative usage.

Applicability status

LANL did not exceed any TQ on June 21, 1999, and therefore, was not subject to the RMP and was not required to register with EPA. LANL will continue to evaluate chemical procurements, review new sources, and track known processes containing regulated substances to determine any change in the applicability status of the RMP. LANL, although not subject to reporting under the RMP, has responsibilities as designated under the programs general duty requirements.

Applicability review

MAQ performs routine reviews and evaluations of chemical procurement records and performs threshold determinations for Clean Air Act (CAA) Section 112(r) toxic and flammable substances. These reviews are performed using procedure MAQ-327, Threshold Determinations for CAA Section 112(r).

Implementation

The following table lists specific responsibilities.

Who	What
Operating Permit Team – Chemical Management SME	Review and evaluate LANL procurement records for 112(r) applicability.

5.8 Modifying the permit application

Permit reopening

This permit will be reopened and revised when any one of the following conditions occurs:

- Additional requirements under the federal CAA become applicable to LANL three (3) or more years before the expiration date of P100
- Additional requirements, including excess emissions requirements, become applicable to LANL under Title IV of the federal Act (the acid rain program)

New sources

LANL must take steps to modify the permit after new or modified sources become operational. The permit must be modified within one year after a new or modified source is brought on-line.

Renewal

The term of P100 is five (5) years. It will expire five years from the date of issuance, or April 29, 2009. Application for renewal of P100 is due twelve (12) months prior to the date of expiration, or April 29, 2008.

Implementation

The following table lists specific responsibilities.

Who	What
Operating Permit Team Leader	Track start-up and modifications of new sources to ensure new requirements are incorporated into the Title V permit within one year.
MAQ Permitting Team	Submit permit updates and permit renewal when required.

Section 6

Design

Design

Identify design requirements

The project requires no design activities.

Section 7

Procurement

Procurement of services

Procurement of items and services

The Operating Permit Team will procure services from qualified persons and/or organizations as needed to accomplish project goals. Procurement of items and services will follow the Laboratory procurement process and the requirements in the MAQ-QMP. Most items and services required for the project are commercial grade in nature and no special procurement requirements or needs are necessary. For items and all services for which special requirements are necessary, the project leader and Team members will identify such items or services. Such items and services include:

- analytical services

Section 8

Inspection and Acceptance Testing

Inspection and Acceptance Testing

Policy

This project does not require inspection and acceptance testing. Any materials or services procured by other organizations for activities that are related to the Operating Permit will be inspected and/or tested prior to acceptance for use in monitoring. Most supplies used during performance of monitoring are commercial grade in nature and require no special acceptance practices or procedures.

Section 9

Management Assessment

Project Management Assessments

Internal assessments

The group conducts internal management assessments of all projects and programs in the group in accordance with requirements in the Quality Management Plan. The Group Leader will perform an assessment of the effectiveness of the project effort periodically. Assessments of the project are documented and filed as records.

Responding to assessments

When violations of requirements are found during a management assessment, a deficiency report is initiated to document the violation. Corrective actions are tracked and documented in accordance with MAQ-026, “Deficiency Reporting and Correcting.”

Section 10

Independent Assessment

Project Assessments

Policy

The Team leader (in coordination with the group QA officer) will ensure that adequate assessments are conducted by those outside MAQ. The MAQ Group Leader may request assessments of any program or team within MAQ. These assessments may also include assessments of organizations that supply information to MAQ.

NMED and EPA inspections

NMED and/or EPA may perform site inspections to review records, inspect equipment, review work practices and conduct sampling or monitoring activities. Inspection personnel shall provide credentials, including proper clearances when required.

Implementation

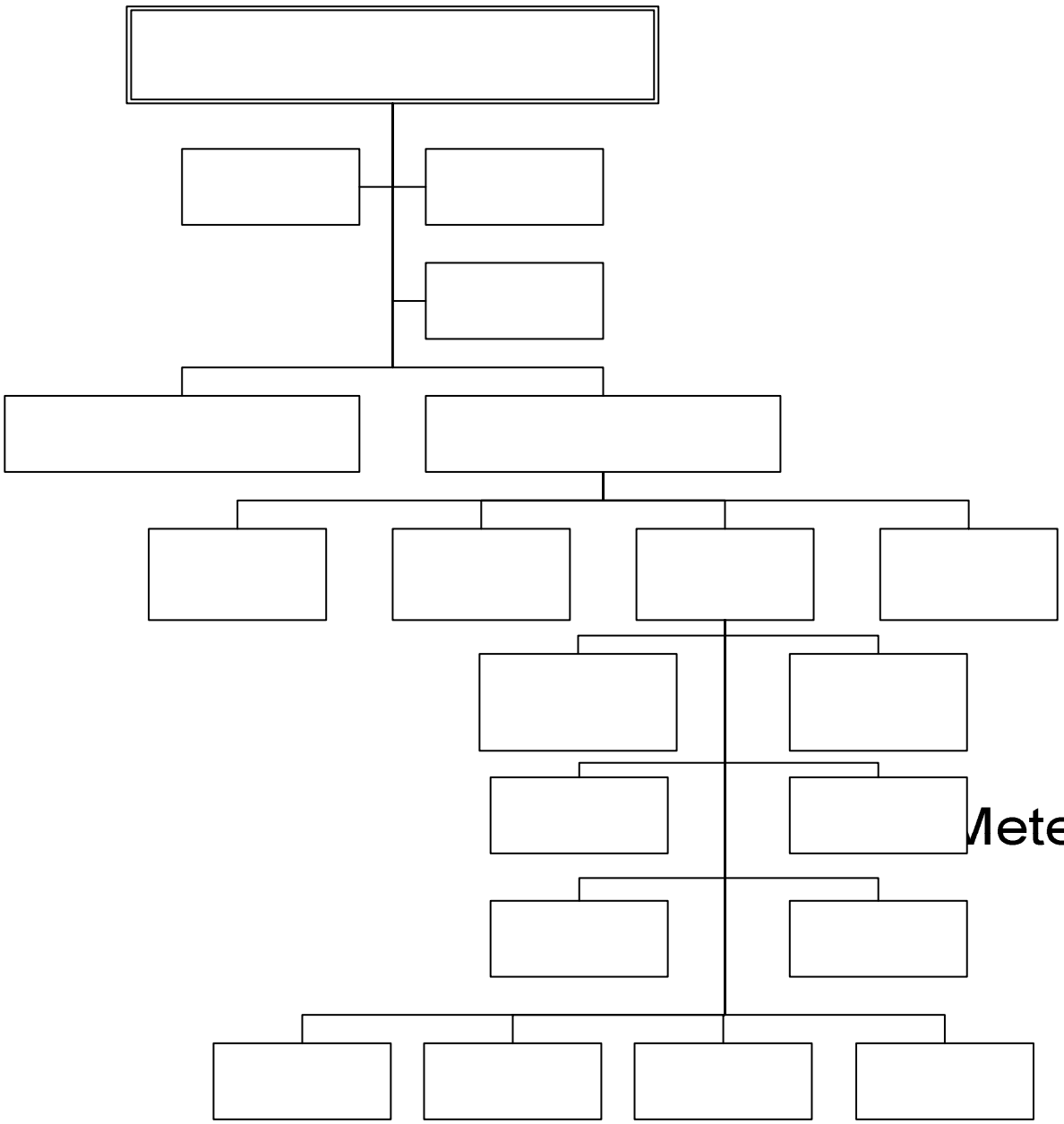
The following table lists specific responsibilities.

Who	What
Operating Permit Team Leader	Request external assessments of the team as deemed necessary to provide assurance that the team meets applicable requirements Arrange access for NMED and EPA personnel during compliance inspections
Quality Assurance Officer	Review audit procedures to ensure they meet the requirements in this section
Group Leader	Request assessments of the team as deemed necessary.

Click here to record “self-study” training to this document.

Appendix A

Operating Permit Project Organization Chart



Appendix B

References

Requirements, guidance, and other non-RRES-MAQ documents:

Clean Air Act Amendments of 1990

40 CFR 50 – 93 (Air Quality Programs)

Title 20 Environmental Protection, Chapter 2 Air Quality, of the New Mexico Administrative Code (20.2 NMAC)

DOE Order 414.1A, "Quality Assurance," issued November 24, 1998 (supersedes DOE Order 5700.6C, "Quality Assurance")

Operating Permit P100 issued April 30, 2004

LANL's Title V application submitted November 27, 2002 with updates

RRES-MAQ documents:

RRES-MAQ-QMP, "Quality Management Plan for the Meteorology and Air Quality Group (RRES-MAQ)"

RRES-MAQ-RN, "Quality Assurance Project Plan for the Rad-NESHAP Compliance Team"

RRES-MAQ-BeNESHAP, "Quality Assurance Project Plan for the Beryllium NESHAP Compliance Project"

RRES-MAQ-ODS, "Quality Management Project Plan for the Ozone Depleting Substances Compliance Project"

RRES-MAQ-ASBESTOS, "Quality Management Project Plan for the Asbestos Report Task"

RRES-MAQ-022, "Preparation, Review and Approval of Procedures"

RRES-MAQ-024, "Personnel Training"

RRES-MAQ-025, "Records Management"

RRES-MAQ-026, "Deficiency Reporting and Correcting"

RRES-MAQ-029, "Management Assessments"

RRES-MAQ-030, “Document Distribution”

RRES-MAQ-034, “Network Server Backup Tape Rotation, Storage, and Archiving”

RRES-MAQ-035, “Work Safety Review and Authorization”

RRES-MAQ-039, “Web Page Posting and Maintenance”

RRES-MAQ-306, “Documenting Operational Open Burns”

RRES-MAQ-307, “Opacity Monitoring”

RRES-MAQ-309, “Chemical Procurement Tracking”

RRES-MAQ-314, “Evaluation of Meteorological Conditions for Open Burning”

RRES-MAQ-317, “Generating Non-Rad Emissions Reports”

RRES-MAQ-327, “Threshold Determination for CAA Section 112(r)”

Appendix C

Records

Source	Record	Maintained Where?	Submitted to MAQ?
Asphalt Plant, TA-60-BDM	Actual hours of operation	Asphalt Plant, TA-60-BDM	No
	Production rates	Asphalt Plant, TA-60-BDM	Yes
	Number of haul truck trips daily	Asphalt Plant, TA-60-BDM	No
	Fuel sulfur content	Asphalt Plant, TA-60-BDM	No
	Tickets of fuel purchased	Asphalt Plant, TA-60-BDM	No
	Quantity and frequency of water applied to haul roads	Asphalt Plant, TA-60-BDM	No
	Frequency of haul road sweeping	Asphalt Plant, TA-60-BDM	No
	Copies of proposed and performed maintenance	Asphalt Plant, TA-60-BDM	No
	Compliance test results for particulate matter and opacity performed within 60 days of initial startup	RRES-MAQ	N/A
	Monthly six (6) minute opacity readings.	Asphalt Plant, TA-60-BDM	Yes
	Monitoring of the differential pressure across the baghouse.	Asphalt Plant, TA-60-BDM	No
Beryllium Activities	Refer to the Beryllium NESHAP Quality Assurance Project Plan RRES-MAQ-BeNESHAP		
Boilers & Heaters, including insignificant units	Total natural gas and fuel oil usage shall be kept on a monthly basis.	Monthly “Facility Wide Natural Gas Usage” report	Yes
Carpenter Shop TA-38	Monthly hours of operation	SM-38 Carpenter Shop logbook	Yes
Carpenter Shop TA-15	Monthly hours of operation	TA-15 hour meter; read monthly	Yes
Chemical Usage	Chemical purchases	ChemLog {Facility-Wide chemical tracking system)	Yes
Degreasers, TA-55	Amount of solvent added to the degreaser	MAQ web-based reporting tool	Yes
	40 CFR 63 Subpart T work practice checklist	TA-55 PF-4	No
Internal Combustion – Stationary Standby	Hours of operation on a semi-annual basis.	FWO-MSE reads hour meters semi-annually and submits input to MAQ	Yes
Internal Combustion – TA-33-G-1	Hourly and 12-month rolling total kWh.	TA-33-G-1 logbook	Yes
	Hours of operation and the time operations begin and end each day.	TA-33-G-1 logbook	No
Paper Shredder	Number of boxes shredded monthly	TA-52-11 on-site logbook	Yes

Source	Record	Maintained Where?	Submitted to MAQ?
Power Plant – TA-3	Total fuel oil usage shall be recorded monthly and on a rolling twelve month total.	Power Plant	Yes
	A record of the total sulfur content of the No. 2 fuel oil used shall be obtained and kept from the supplier whenever oil is delivered to the facility.	Power Plant	Yes
	Records of total natural gas usage shall be kept daily and on a 365 day rolling total.	Power Plant	No
	A record shall be kept to verify natural gas consumed is pipeline quality natural gas (less than 5 grains of total sulfur per 100 standard cubic foot).	Power Plant	Yes
Refrigerants	Refer to the Quality Assurance Project Plan for the Ozone Depleting Substances (ODS) Compliance Project RRES-MAQ-ODS		
Radionuclides	Refer to the Quality Assurance Project Plan for the Rad-NESHAP Compliance Project RRES-MAQ-RN		
Asbestos	Refer to the Quality Assurance Project Plan for the Asbestos Report Project RRES-MAQ-ASBESTOS		

Appendix D

Monitoring Requirements

Source	Monitoring Requirement	Performed or recorded by?	Submitted to MAQ?	Included in monitoring reports?
Asphalt Plant, TA-60-BDM	Perform monthly six (6) minute opacity readings for each emission point having opacity greater than zero	Asphalt Plant, TA-60-BDM	Yes	Yes
	Monitor the differential pressure (inches of water) across the baghouse by the use of a differential pressure gauge	Asphalt Plant, TA-60-BDM	No	No
Beryllium Activities – TA-3-29	Maintain log indicating the number of Be samples processed	NMT-7	No	No
Beryllium Activities – TA-3-66	Maintain log indicating the number of metallographic specimens used in the polishing operation and the weight of Be samples processed in the electroplating/ chemical milling, machining and arc melting/casting operations.	MST	No	No
Beryllium Activities – TA-3-141	Maintain continuous emission monitoring system on stack	MAQ	Yes	Yes (separate quarterly report to NMED)
	Monitor differential pressure across HEPA and cartridge filters	NMT	No	No
Beryllium Activities – TA-16-207	Maintain project files of components prepared for testing	ESA	No	No
Beryllium Activities – TA-35-87	Maintain log showing the number of beryllium filters cut	P	No	No
Beryllium Activities – TA-35-213	Maintain stack emission test results	MAQ	No	No
Beryllium Activities – TA-55-PF4	Monitor differential pressure across HEPA filters	NMT	No	No
	Perform annual HEPA filter challenge tests	NMT/HSR-5	Yes	Yes

Source	Monitoring Requirement	Performed or recorded by?	Submitted to MAQ?	Included in monitoring reports?
Boilers & Heaters	Steam Plant (TA-21-357-1, TA-21-357-2, and TA-21-357-3): A volumetric flow meter shall be utilized to measure the total amount of natural gas being used on a monthly basis.	FMU-UI	Yes – included on the "Facility Wide Natural Gas Usage" report	No
	TA-55-6-BHW-1 and TA-55-6-BHW-2: A volumetric flow meter shall be utilized to measure the total amount of natural gas being used on a monthly basis.	FMU- submits monthly meter readings to FWO-UI	Yes – included on the "Facility Wide Natural Gas Usage" report	No
Carpenter Shop TA-3 SM-38	Carpenter shop shall maintain a log of the hours the shop is in operation	SM-38 Carpenter Shop logbook	Yes	No
Carpenter Shop TA-15	Carpenter shop shall maintain a log of the hours the shop is in operation	TA-15 Carpenter Shop logbook	Yes	No
Chemical Usage	Chemical purchases	ChemLog {Facility-Wide chemical tracking system)	Yes	No
Degreasers	Amount of solvent added to the degreaser	MAQ internal web reporting tool	Yes	No
	40 CFR 63 Subpart T work practice checklist	TA-55 PF-4	No	No
Internal Combustion – Stationary Standby	Track and record hours of operation on a semi-annual basis	FWO-MSE reads hour meters semi-annually and submits input to MAQ	Yes	No
Internal Combustion – TA-33 Process Generator	Track hourly and 12-month rolling total kWh	ISR-10	Yes	No
	Record hours of operation and the time operation begins and ends each day	ISR-10	No	No
Paper Shredder	Monthly number of boxes of media shredded	TA-52-11 Paper Shredder logbook	Yes	No
Power Plant – TA-3	A volumetric flow meter shall be installed and utilized to measure the total amount of natural gas being used on a daily basis.	Power Plant	No	No
	Total fuel oil consumption shall be monitored on a monthly basis.	Power Plant	Yes – Included on the Plant Quantities Report	No

Source	Monitoring Requirement	Performed or recorded by?	Submitted to MAQ?	Included in monitoring reports?
	If total natural gas used exceeds 3,400 MMscf per 365 day rolling total, semiannual compliance stack tests shall be conducted for NO_x and CO from each unit in accordance with NSR permit 2195B. This testing shall continue until natural gas usage is calculated to be less than 3,400 MMscf per 365 day rolling total for a total of 730 consecutive days.	Power Plant	Monitored by Power Plant and MAQ	Yes
Refrigerants	Refer to the Quality Assurance Project Plan for the Ozone Depleting Substances (ODS) Compliance Project RRES-MAQ-ODS			No
Radionuclides	Refer to the Quality Assurance Project Plan for the Rad-NESHAP Compliance Project RRES-MAQ-RN			No
Asbestos	Refer to the Quality Assurance Project Plan for the Asbestos Report Project RRES-MAQ-ASBESTOS			No

Appendix E

Data Deliverable Content

Source	Records	KSL DD* – Gas Usage	KSL DD* – Plant Quantities Report	KSL DD* – All Other	FWO-MSE	HSR-5	Other Sources
Asphalt Plant, TA-60-BDM	Monthly production rate			**X**			
	Monthly opacity reading			**X**			
Beryllium Activities	Annual HEPA filter test results – TA-3-141					**X**	
	Annual HEPA filter test results – TA-35-213					**X**	
	Annual HEPA filter test results – TA-55 PF-4					**X**	
Boilers & Heaters	TA-21-357-1, TA-21-357-2, and TA-21-357-3 monthly gas meter readings.	**X**					
	TA-55-6-BHW-1 and TA-55-6-BHW-2 monthly gas meter readings.	**X**					
Carpenter Shop TA-3-38	Monthly hours of operation			**X**			
Carpenter Shop TA-15	Monthly hours of operation				**X**		
Chemical Usage	Chemical purchases						**X** {ChemLog}
Degreaser(s)	Amount of solvent added to the degreaser						**X** {Web Report}
Internal Combustion – Stationary Standby	Hours of operation on a semi-annual basis.				**X**		
Internal Combustion – TA-33-G-1	Hourly and 12-month rolling total kWh.						**X** {ISR-10}

Source	Records	KSL DD* – Gas Usage	KSL DD* – Plant Quantities Report	KSL DD* – All Other	FWO-MSE	HSR-5	Other Sources
Paper Shredder	Monthly number of boxes of media shredded			X			
Power Plant – TA-3	Total fuel oil usage shall be recorded monthly and on a rolling twelve month total.		X				
	A record of the total sulfur content of the No. 2 fuel oil used shall be obtained and kept from the supplier whenever oil is delivered to the facility.			X			
	Records of total natural gas usage shall be kept daily and on a 365 day rolling total.	X					
	A record shall be kept to verify natural gas consumed is pipeline quality natural gas (less than 5 grains of total sulfur per 100 standard cubic foot).			X			

**** DD = Data Deliverable***

Appendix F

Semi-annual Emission Report

Source	Location	Included in semi-annul emission reports?[1]	Include in annual emission inventory report? [2]
Asphalt Plant, TA-60-BDM	TA-60-BDM	Yes	Yes
Beryllium Activities	TA-3-29	No	No
	TA-3-66	No	No
	TA-3-141	Yes	Yes
	TA-16-207	No	No
	TA-35-87	No	No
	TA-35-213	Yes	Yes
	TA-55-PF4	Yes	Yes
Boilers & Heaters	TA-16-1484-BS-1	Yes	Yes
	TA-16-1484-BS-2	Yes	Yes
	TA-16-1485-BS-1	Yes	Yes
	TA-16-1485-BS-2	Yes	Yes
	TA-21-357-1	Yes	Yes
	TA-21-357-2	Yes	Yes
	TA-21-357-3	Yes	Yes
	TA-48-1-BS-1	Yes	Yes
	TA-48-1-BS-2	Yes	Yes
	TA-48-1-BS-6	Yes	Yes
	TA-50-2	Yes	Yes
	TA-53-365-BHW-1	Yes	Yes
	TA-53-365-BHW-2	Yes	Yes
	TA-55-6-BHW-1	Yes	Yes
	TA-55-6-BHW-2	Yes	Yes
	TA-59-1-BHW-1	Yes	Yes
	TA-59-1-BHW-2	Yes	Yes
	Insignificant emission units	Yes	No
Carpenter Shops	TA-3 SM-38	Yes	Yes
	TA-15-563	Yes	Yes
Chemical Usage	Facility Wide VOCs	Yes	Yes
	Individual HAP	Yes	Yes
	Total HAP	Yes	Yes
	Fugitive Emissions	Yes	Yes
Degreasers	TA-55-DG-1	Yes	Yes
	TA-55-DG-2	Yes	Yes
	TA-55-DG-3	Yes	Yes
Internal Combustion	TA-33-G-1	Yes	Yes
	Standby Generators	Yes	No
Paper Shredder	TA-52-11	Yes	Yes
Power Plant – TA-3	TA-3-22-1	Yes	Yes
	TA-3-22-2	Yes	Yes
	TA-3-22/3	Yes	Yes

Source	Location	Included in semi-annul emission reports?[1]	Include in annual emission inventory report? [2]
Refrigerants	Various	No	No
Open Burning	Various	No	No
Radionuclides	Various	No	No
Asbestos	Various	No	No

1. Also includes PSD determination.
2.Emissions Inventory list is not complete.

Appendix G

Allowable Emission Limit Summary

Emission Units	Allowable Emission Limits							
	NOx	SO2	PM	TSP	CO	VOC	Single HAP	Total HAP
Asphalt Plant, TA-60-BDM	1.0 tpy	1.0 tpy	0.04 gr/dscf 35.4 lbs/hr		2.6 tpy	1.0 tpy		
Beryllium Activities								
TA-3-29			10 gm/24 hr				10 gm/24 hr	
TA-3-66			10 gm/24 hr				10 gm/24 hr	
TA-3-141			0.35 gm/24 hr 3.5 gm/yr				0.35 gm/24 hr 3.5 gm/yr	
TA-16-207			10 gm/24 hr				10 gm/24 hr	
TA-35-87			10 gm/24 hr				10 gm/24 hr	
TA-35-213			1.8E-04 gm/yr 0.36 gm/yr				1.8E-04 gm/yr 0.36 gm/yr	
TA-55 Machining			0.12 gm/24 hr 2.99 gm/yr				0.12 gm/24 hr 2.99 gm/yr	
TA-55 Foundry			3.49E-05 gm/24 hr 8.73E-04 gm/yr				3.49E-05 gm/24 hr 8.73E-04 gm/yr	
Boilers & heaters, including TA-21 Power Plant	80 tpy	50 tpy	50 tpy		80 tpy	50 tpy		
Carpenter Shop TA-3-38			2.81 tpy					
Carpenter Shop TA-15			3.07 tpy					

Emission Units	Allowable Emission Limits							
	NOx	**SO2**	**PM**	**TSP**	**CO**	**VOC**	**Single HAP**	**Total HAP**
Chemical Usage						See below	8 tpy facility wide	24 tpy facility wide
Degreasers						Included in facility wide chemical limits		
Internal Combustion TA-33-G-1	18.1 tpy	2.5 tpy	0.6 tpy	0.6 tpy	15.2 tpy	0.3 tpy		
Paper Shredder TA-52-11				13 tpy				
Power Plant TA-3	99.6 tpy	36.9 tpy	15.7 tpy	15.7 tpy	81.3 tpy	11.1 tpy		
Facility Wide Limits	**245 tpy**	**150 tpy**	**120 tpy**	**120 tpy**	**225 tpy**	**200 tpy**	**8 tpy**	**24 tpy**

Chemical Usage: The contribution of VOC and/or hazardous air pollutants (HAPs) emissions from chemical usage shall not cause the corresponding facility-wide limits of 200 tons per year of facility-wide VOCs, 8 tons per year of individual facility-wide HAP, or 24 tons per year of total facility-wide HAPs to be exceeded.

Appendix H

Title V Report Schedule

(certified by responsible official)

Due Date	Report	To
30 January	Annual Operating Permit Compliance Certification	NMED
14 February	Semi-Annual Operating Permit Monitoring Report	NMED
31 March	Semi-Annual Operating Permit Emission Report	NMED
1 April	Emissions Inventory Report	NMED
14 August	Semi-Annual Operating Permit Monitoring Report	NMED
28 September	Semi-Annual Operating Permit Emission Report	NMED
As Required	Deviation/Excess Emission/Emergency Reports	NMED

Other Reports

(not certified by responsible official)

Due Date	Report	To
1 March	Annual Fire Activity Report {annual report required – no date specified}	NMED
1 March	4th Quarter Beryllium Technology Facility Sampling Report	NMED
1 March	4th Quarter Asbestos Waste Disposal Report	NMED
30 May	1st Quarter Beryllium Technology Facility Sampling Report	NMED
30 May	1st Quarter Asbestos Waste Disposal Report	NMED
30 June	Annual RAD NESHAP Report	EPA
29 August	2nd Quarter Beryllium Technology Facility Sampling Report	NMED
29 August	2st Quarter Asbestos Waste Disposal Report	NMED
29 November	3rd Quarter Beryllium Technology Facility Sampling Report	NMED
29 November	3st Quarter Asbestos Waste Disposal Report	NMED
1 December	Annual Report to DOE on ODS Phase-Out	DOE
15 December	Forecast of Anticipated Asbestos Removal for Next Year	NMED

Appendix I

Applicable Requirements for LANL

Applicable Requirement	Federally Enforceable	Entire Facility	Unit Numbers
20.2.3 NMAC - NMAAQS	X	X	
20.2.7 NMAC - Excess Emissions during Malfunction, Startup, Shutdown, or Scheduled Maintenance	X	X	
20.2.11 NMAC - Asphalt Process Equipment	X		TA-60-BDM
20.2.33 NMAC – Gas Burning Equipment – Nitrogen Dioxide	X		TA-3-22-1 TA-3-22-2 TA-3-22-3
20.2.34 NMAC – Oil Burning Equipment – Nitrogen Dioxide	X		TA-3-22-1 TA-3-22-2 TA-3-22-3
20.2.60 NMAC - Open Burning	X	X	
20.2.61 NMAC - Smoke and Visible Emissions	X		TA-3-22-1 TA-3-22-2 TA-3-22-3 TA-16-1484-BS-1 TA-16-1484-BS-2 TA-16-1485-BS-1 TA-16-1485-BS-2 TA-48-1-BS-1 TA-48-1-BS-2 TA-48-BS-6 TA-53-365-BHW-1 TA-53-365-BHW-2 TA-55-6-BHW-1 TA-55-6-BHW-2 TA-59-1-BHW-1 TA-59-1-BHW-2 TA-50-2 TA-21-357-1 TA-21-357-2 TA-21-357-3 TA-33-G-1
20.2.70 NMAC - Operating Permits	X	X	
20.2.71 NMAC - Operating Permit Emission Fees	X	X	
NSR Permits 632, 634, 636, 1081, 2195, 2195-B, 2195-F, GCP-3-2195-G	X		As referenced in the permit

Applicable Requirement	Federally Enforceable	Entire Facility	Unit Numbers
20.2.73 NMAC - Notice of Intent and Emissions Inventory Requirements	X	X	
40 CFR Part 50 – National Primary and Secondary Ambient Air Quality Standards	X	X	
40 CFR Part 60 - Subpart Dc - NSPS for Small Industrial-Commercial-Institutional Steam Generating Units	X		TA-55-6-BHW-1 TA-55-6-BHW-2
40 CFR Part 60 – Subpart I - NSPS for Hot Mix Asphalt Facilities	X		TA-60-BDM
40 CFR Part 61 - Subpart C - NESHAP for Beryllium	X		TA-3-141 TA-3-102 TA-35-213 TA-55-PF4 TA-3-29 TA-3-66 TA-16-207 TA-35-87
40 CFR 61- Subpart H - NESHAP for Radionuclides other than Radon from DOE Facilities	X	X	
40 CFR Part 61 - Subpart M - NESHAP for Asbestos	X	X	
40 CFR 61 – Subpart Q - NESHAP for Radon Emissions from DOE Facilities	X	X	
40 CFR Part 63 - Subpart T - MACT for Halogenated Solvent Cleaning	X		TA-55-DG-1 TA-55-DG-2 TA-55-DG-3
40 CFR 82 – Subpart B - Servicing of Motor Vehicle Air Conditioners	X	X	
40 CFR 82 – Subpart F - Recycling and Emission Reduction	X	X	
40 CFR 82 – Subpart H – Halon Emissions Reduction	X	X	